

Appl. No. 10/708,783
Amdt. dated January 23, 2006
Reply to Office action of October 27, 2005

No amendments are made to the claims, and the claims are merely listed for reference.

Listing of Claims:

Claim 1-7 (Canceled).

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Claim 8 (Previously presented): A method for monitoring a machine comprising:

- selecting a product wafer running through the machine;
- performing a non-destructive detection to the selected product wafer
- 10 to inspect a plurality of defects;
- separating pre-layer defects from defects generated by the machine;
- analyzing the defects generated by the machine for killer defects;
- if killer defects are present among the defects generated by the machine, initiating an alarm on the machine; and
- 15 if killer defects are not present among the defects generated by the machine, processing a work of the machine.

Claim 9 (Previously presented): The method of claim 8 wherein the step of separating the pre-layer defects is performed according to a predetermined

20 database, the database comprising a classifying rule of each defect type and defect information of each defect type.

Claim 10 (Previously presented): The method of claim 9 wherein the defect information of each defect type comprises an influence degree over a yield

25 of the machine of each defect type.

Claim 11 (Previously presented): The method of claim 8 wherein when killer defects are detected, the method further comprises following steps:

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performing a root cause analysis according to the defect type of the
detected defects; and

informing a responsible person of the machine to correct process
parameters of the machine.

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Claim 12 (Previously presented): The method of claim 8 wherein the
method utilizes inline automatic defect classification (ADC) tools to
classify the defects.

10 Claim 13 (Previously presented): The method of claim 12 wherein the ADC
tools includes databases of defect types of each layer to classify the
defects.